

Notice of Allowability

Application No.

10/688,857

Applicant(s)

JABRI ET AL.

Examiner

V. Paul Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/24/2004 and previous.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

V. PAUL HARPER
PRIMARY PATENT EXAMINER



DETAILED ACTION

Citation of Pertinent Art

1. The following prior art made of record but is considered pertinent to the applicant's disclosure:
 - Hasegawa (US Patent Application Publication 6003/0103524) discloses a multimedia information providing method and apparatus.
 - Holler (US Patent 6,717,955) discloses a data communications method and apparatus.
 - Ohsuge (US Patent Application Publication 2002/0028670) discloses a mobile telephone with voice data compression and recording features.
 - Zheng et al. (US Patent 6,314,393) disclose a parallel pipeline VLSI architecture for a low-delay CELP coder/decoder.

Reasons for Allowance

2. Claims 1-33 are allowed.
3. It is noted that the closest prior art of record, Ohsuge (US Patent Application Publication 2002/0028670) discloses a modular voice codec, but Oshuge does not teach the following:

Regarding **claim 1**, the Applicants teach an apparatus for encoding and decoding a voice signal, the apparatus comprising: an encoder configured to generate

an output bitstream signal from an input voice signal, the output bitstream signal associated with at least a first standard of a first plurality of CELP voice compression standards; a decoder configured to generate an output voice signal from an input bitstream signal, the input bitstream signal associated with at least a first standard of a second plurality of CELP voice compression standards; wherein the CELP encoder comprises: a plurality of codec-specific encoder modules, at least one of the plurality of codec-specific encoder modules including at least a first table, at least a first function or at least a first operation, the first table, the first function or the first operation associated with only a second standard of the first plurality of CELP voice compression standards; a plurality of generic encoder modules, at least one of the plurality of generic encoder modules including at least a second table, a second function or a second operation, the second table, the second function or the second operation associated with at least a third standard and a fourth standard of the first plurality of CELP voice compression standards, the third standard and the fourth standard of the first plurality of CELP voice compression standards being different; wherein the CELP decoder comprises: a plurality of codec-specific decoder modules, at least one of the plurality of codec-specific decoder modules including at least a third table, at least a third function or at least a third operation, the third table, the third function or the third operation associated with only a second standard of the second plurality of CELP voice compression standards; a plurality of generic decoder modules, at least one of the plurality of generic decoder modules including at least a fourth table, a fourth function or a fourth operation, the fourth table, the fourth function or the fourth operation associated with at least a

third standard and a fourth standard of the second plurality of CELP voice compression standards, the third standard and the fourth standard of the second plurality of CELP voice compression standards being different.

And regarding **claim 18**, the Applicants teach comprising: 18.A method for encoding and decoding a voice signal, the method receiving an input voice signal; processing the input voice signal; generating an output bitstream signal based on at least information associated with the input voice signal, the output bitstream signal associated with at least a first standard of a first plurality of CELP voice compression standards; receiving an input bitstream signal; processing the input bitstream signal; generating an output voice signal based on at least information associated with the input bitstream signal, the output voice signal associated with at least a first standard of a second plurality of CELP voice compression standards; wherein the processing the input voice signal uses at least a first common functions library, at least a first common math operations library, and at least a first common tables library, the first common functions library including a first function; the first common math operations library including a first operation, the first common tables library including a first table; wherein the first function, the first operation and the first table are associated with at least a second standard and a third standard of the first plurality of CELP voice compression standards, the second standard and the third standard of the first plurality of CELP voice compression standards being different; wherein the generating an output bitstream signal comprises: generating a first plurality of codec-specific CELP

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parameters based on at least information associated with the input voice signal; packing the first plurality of codec-specific CELP parameters to the output bitstream signal wherein the processing the input bitstream signal uses at least a second common functions library, at least a second common math operations library, and a second common tables library, the second common functions library including a second function, the second common math operations library including a second operation, the second common tables library including a second table; wherein the second function, the second operation and the second table are associated with at least a second standard and a third standard of the second plurality of CELP voice compression standards, the second standard and the third standard of the second plurality of CELP voice compression standards being different; wherein the generating an output voice signal comprises: unpacking the input bitstream signal; decoding a second plurality of codec-specific CELP parameters to produce an output voice signal.

4. Thus, independent claims 1 and 18 are allowable over the prior art of record because the cited prior art alone or in combination, does not fairly suggest or disclose the claimed combination of features.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement for Reasons of Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Paul Harper whose telephone number is (571) 272-7605. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

5/1/2007

VPH

V. PAUL HARPER
PRIMARY PATENT EXAMINER

